

S/N unknown

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gill, et al. Serial No.: unknown
Filed: concurrent herewith Docket No.: 7500.360US01
Title: IMPROVEMENTS IN AND RELATING TO ANALYSIS OF DNA
SAMPLES

CERTIFICATE UNDER 37 CFR 1.10

'Express Mail' mailing label number: EL815520636US

Date of Deposit: April 13, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

By: Yolanda Gray

Name: Yolanda Gray

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D. C. 20231

Dear Sir:

In connection with the above-identified application filed herewith, please enter the following preliminary amendment in accordance with 37 CFR 1.121, a copy of which is enclosed herewith:

IN THE CLAIMS

Please amend the claims as follows:

1. (AMENDED) A method of comparing one or more reference samples of DNA in which the reference samples are from known individuals and/or associated with other known factors with at least part of a test sample of DNA from a known individual and/or be associated with one or more other known factors, the method including:-
the determination of the identity of the alleles present at a locus for the DNA in the test sample,
the determination defining an individual test result, the determination being performed for a plurality of loci to give a plurality of individual test results,
the consideration of one of the plurality of individual test results against the individual reference result of one of the reference samples for the respective loci, the consideration involving an

expression of the probability that the individual reference result for that locus could lead by various possible routes to the individual test result for that locus, the possible routes to the individual test result including routes where spurious information contributes to the individual test result, the expression of the probability is a probability function and the probability function includes a probability that contamination may occur, a probability that stutter may occur, a probability that allele dropout may occur, and a probability that artifact reporting may occur; the consideration being repeated for a plurality of loci, the expressions of probability that the individual reference result could lead to the individual test result for the plurality of loci being combined to give an expression of the probability that the test sample matches the reference sample by calculating a likelihood ratio.

REMARKS

The above preliminary amendment is made to correct the wording in claim 1.

Please refer to the Marked-Up claim page 45, attached herewith.

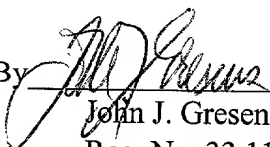
Applicants respectfully request that the preliminary amendment described herein be entered into the record prior to calculation of the filing fee and prior to examination and consideration of the above-identified application.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, JJG (Reg. No. 33,112), at (612) 371.5265.

Respectfully submitted,

MERCHANT & GOULD P.C.
Post Office Box 2903
Minneapolis, Minnesota 55402-0903
(612) 371-5265

Dated: April 13, 2001

By 
John J. Gresens
Reg. No. 33,112

JJG/rw



CLAIMS:

1. A method of comparing one or more reference samples of DNA [method according to claim 1] in which the reference samples are from known individuals and/or associated with other known factors with at least part of a test sample of DNA from a known individual and/or be associated with one or more other known factors, the method including:-
the determination of the identity of the alleles present at a locus for the DNA in the test sample, the determination defining an individual test result, the determination being performed for a plurality of loci to give a plurality of individual test results,
the consideration of one of the plurality of individual test results against the individual reference result of one of the reference samples for the respective loci, the consideration involving an expression of the probability that the individual reference result for that locus could lead by various possible routes to the individual test result for that locus, the possible routes to the individual test result including routes where spurious information contributes to the individual test result, the expression of the probability is a probability function and the probability function includes a probability that contamination may occur, a probability that stutter may occur, a probability that allele dropout may occur, and a probability that artifact reporting may occur;
the consideration being repeated for a plurality of loci, the expressions of probability that the individual reference result could lead to the individual test result for the plurality of loci being combined to give an expression of the probability that the test sample matches the reference sample by calculating a likelihood ratio.
2. A method of comparing one or more reference samples of DNA with at least part of a test sample of DNA, the method including:-
the determination of the identity of the alleles present at a locus for the DNA in the test sample, the determination defining an individual test result, the determination being performed for a plurality of loci to give a plurality of individual test results,
the consideration of one of the plurality of individual test results against the individual reference result of one of the reference samples for the respective loci, the consideration